

REMARKS

Applicants respectfully request reconsideration of the application.

Claims 1-6, 12, 15, and 9-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,611,812 to Hurtado et al. ("Hurtado").

Claims 7-11, 14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of U.S. Patent No. 6,549,922 to Sirvastava et al. ("Sirvastava").

Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of U.S. Patent No. 6,571,222 to Matsumoto et al. ("Matsumoto").

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of U.S. Patent No. 6,678,332 to Gardere et al. ("Gardere").

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of U.S. Patent No. 5,944,833 to Ugon ("Ugon").

Applicants respectfully traverse the rejections of the original claims. While Hurtado discloses the use of watermarking, it fails to teach many aspects of the claims. Moreover, the secondary references fail to teach the claim elements that are missing from Hurtado. Nevertheless, Applicants have amended the claims to focus the invention on alternative aspects. The cited art fails to disclose, teach or suggest all of the elements of the pending claims as set forth below.

Claim 4

Hurtado does not disclose or teach elements of claim 4, such as: steganographically embedding compressed voice data into a printed image. Hurtado refers to binary metadata, such as graphics and an audio preview clip, but Hurtado fails to teach steganographically embedding compressed voice data into a printed image as claimed. Hurtado describes a watermarking process 808 at col. 56 in the context of the work flow manager shown in Fig. 8. Hurtado's description of the data included in the watermark, e.g., watermarking parameters (See col. 56) is limited, and Hurtado does not provide any detail regarding how the watermark is processed. While Hurtado refers to compression of content, this compression is performed on the content, not on metadata that is embedded in the content as claimed. Moreover, the compression process 809 in Fig. 8 is performed on the content after that content is watermarked. Therefore, Hurtado explicitly does not perform compression of data included in the watermark.

Claim 5

Hurtado does not disclose or teach the elements of claim 5, such as: steganographically embedding compressed voice data in video as claimed. The passages cited by the Office are not applicable to claim 5 for similar reasons as provided above for claim 4.

Claim 6

Hurtado fails to disclose: “embedding metadata steganographically in the media signal; wherein the metadata in the media signal includes a metadata digest” as claimed. In Fig. 6, Hurtado clearly shows that the content secure container 630 is separate from the metadata secure container 620. This metadata is not embedded in the content. In Hurtado, the content provider creates a metadata secure container around a symmetric key 623 and usage conditions 517. The Office relies on col. 28, lines 5-9 as allegedly showing “the metadata in the media signal includes a metadata digest.” This passage states that a record for the metadata secure container bill of materials is included in the offer secure container. This record includes a digest for the metadata secure container bill of materials. This passage from Hurtado is irrelevant to the claims because it fails to provide any teaching about embedding metadata, including a metadata digest, in the media signal as claimed. Hurtado’s metadata secure container is separate from the content secure container; and therefore, Hurtado expressly teaches away from embedding the metadata secure container in the content.

Claim 13

Claim 13 stands rejected based on a combination of Hurtado and Ugon. The Office relies on element 624 of Fig. 6 in Hurtado as allegedly showing a content signature of the media signal. However, this is a signature of the content provider, not a content signature of the media signal as claimed. Moreover, this signature in Hurtado is not steganographically embedded in the media signal as claimed. The Office relies on Ugon as allegedly showing “computing the hash includes low pass filtering the media signal.” The cited passage in Ugon at col. 10, lines 4-20 refers to a random number generator, where the output is low pass filtered. There is no teaching in this passage of computing a hash, including low pass filtering a media signal. Instead, Ugon is suggesting a low pass filter of the output of a random number generator.

Claim 14

Claim 14 stands rejected based on a combination of Hurtado and Siravasta. As noted above for claim 13, Hurtado does not teach a content signature of a media signal and steganographically embedding metadata including the content signature in the media signal as claimed. Moreover, Hurtado does not

teach that computing the hash includes computing salient features of the media signal. The Office cites a passage in Hurtado relating to lossy compression as allegedly corresponding to the claimed hash. Even assuming a compression of a media signal is a hash as claimed, Hurtado fails to teach any method of steganographically embedding compressed content in the content.

Claim 15

Hurtado fails to disclose: “embedding metadata steganographically in the media signal wherein the metadata in the media signal includes the metadata signature” as claimed. The Office has cited Fig. 6, element 624 in Hurtado as allegedly teaching elements of claim 15. As noted previously, element 624 is a signature of a content provider. It is not a metadata signature as claimed. Moreover, the content provider signature 624 is part of the secure container 620 around a symmetric key 623 and usage conditions 517. This secure container is totally separate from, and is not embedded in the content, which is encrypted in a separate secure container 630. Therefore, Hurtado fails to disclose or teach the elements of claim 15.

Claim 20

Hurtado fails to disclose steganographic embedding of metadata, including a time stamp, in a media signal. Further, Hurtado fails to disclose marking an event of processing the media signal with the time stamp as claimed.

Claim 25

Hurtado fails to disclose steganographic embedding of metadata, including a location stamp, in a media signal. Further, Hurtado fails to disclose marking an event of processing the media signal with the location stamp as claimed.

Claims 29

Claim 29 is rejected based on a combination of Hurtado and Matsumoto. The combined teachings fail to teach or suggest: “metadata in the media signal and the external metadata stored externally are related in a manner in which validity of the metadata can be evaluated by comparison” in combination with the other claim elements. Matsumoto is cited as disclosing this aspect of the claim at col. 9, lines 24-49. This cited passage describes a challenge-response authentication procedure between two components called the importer and the trader. The trader sends challenge information to the importer, which returns information to the trader. The trader then compares the received information with the challenge information. There is no teaching in either reference of the claimed relationship

between metadata embedded in a media signal and metadata stored externally. Moreover, there is no suggestion to modify the teachings of the references to create the novel combination of elements in claim 29. Therefore, the cited art does not render claim 29 obvious.

Dependent Claims

The dependent claims include additional elements that distinguish them from the cited art. These points are not elaborated on here because the independent claims are sufficiently distinguished relative to the cited art.

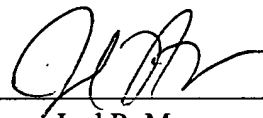
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Respectfully submitted,

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